REMARKS / DISCUSSION OF ISSUES

Claims 1-21 are pending in the application.

The Office action rejects claims 17-19 under 35 U.S.C. 101. The applicants respectfully traverse this rejection.

The Office action asserts that every term in a claim must be expressly defined within the claim, but provides no basis for this assertion. The applicants note that the "Guidelines" cited by the Examiner is replete with references to "computer-readable medium", and does not state that the term must be expressly defined within the claims. The applicants also note that claims are commonly drawn to a "system", an "apparatus", a "processor", and so on, without a requirement to expressly define the words "system", "apparatus", and "processor" within the claims. The applicants also note that the Office action fails to provide support for the assertion that a lack of a definition converts otherwise statutory subject matter into non-statutory subject matter.

Because the Office action fails to provide support to the assertion that a lack of a definition of a term in a claim renders the claim to be directed to non-statutory subject matter, the applicants respectfully maintain that the rejection of claims 17-19 under 35 U.S.C. 101 is unfounded and should be withdrawn.

The Office action rejects claims 1-21 under 35 U.S.C. 102(e) over Hosono (USP 5,796,438). The applicants respectfully traverse this rejection.

Hosono is silent with regard to motion-compensated interpolation between video pictures. Hosono teaches a technique for avoiding flicker when a still image is displayed by a conventional MPEG decoder. Hosono teaches conventional MPEG encoding and decoding using motion-estimation prediction. At the decoder, after applying conventional MPEG decoding, an averaging/interpolating technique is applied in the horizontal and vertical directions within the same video image:

> "In the decoder, decoding in accordance with the MPEG rule is carried out by the original picture data restored and stored in the frame memory and by the averaging bitstream vertically shifting the vector by 0.5. Thus the decoder outputs vertically averaged interpolated picture data as shown in FIG. 2B." (Hosono, column 5, lines 26-30.)
> "FIG. 4A and 4B shows averaging interpolation in both the horizontal and vertical directions." (Hosono, column 6, lines 47-48.)

Hosono fails to teach encoding a video picture by determining if a segment of a video picture can be reconstructed from at least another video picture based on motion-compensated interpolation applied to an other video picture, as specifically claimed in independent claims 1, 5, and 18. Hosono's pictures are encoded using convention MPEG encoding, which does not include motion-compensated interpolation. The Examiner's attention is requested to the applicants' "Background Art" and "Summary of the Invention" for the differences between motion-estimated prediction as used in MPEG and motion-compensated interpolation as used in this invention.

The Office action asserts that Hosono teaches determining if a segment of a video picture can be reconstructed from at least another video picture based on motion-compensated interpolation applied to the other video picture, and, if the segment cannot be reconstructed, encoding the segment at column 8, lines 30-40. The applicants respectfully disagree with this assertion. At the cited text, Hosono teaches:

> "As for the B-picture, basically a difference from mean values of a temporally previous frame and/or a temporally succeeding frame is found and the difference is encoded and transmitted.
> "If the difference (encoded difference) is to be transmitted, as in the case of the P- or B-picture, a motion vector with respect to the picture of the frame the difference from which is calculated, that is a prediction picture, is transmitted along with the difference data. The motion vector is the frame-to-frame motion vector for forward prediction and/or frame-to-frame motion vector for backward prediction." (Hosono, column 8, lines 30-40.)

As can be seen, in the cited text Hosono does not teach determining if a segment of a video picture can be reconstructed from at least another video picture based on motion-compensated interpolation applied to the other video picture, and does not teach encoding the segment if the segment cannot be reconstructed.

Hosono fails to teach reconstructing a missing segment from motion-compensated interpolation applied to at least another video picture, as specifically claimed in independent claims 9, 13, 17, and 19.

The Office action asserts that Hosono teaches reconstructing the segment from motion-compensated interpolation applied to at least another video picture at the above cited column 8, lines 30-40. As noted above, at the cited text Hosono is silent with regard to motion-compensated interpolation.

Because Hosono does not teach motion-compensated interpolation, which is included in each of the applicants' independent claims, the applicants respectfully maintain that the rejection of claims 1-21 under 35 U.S.C. 102(e) over Hosono is unfounded, and should be withdrawn.

In view of the foregoing, the applicants respectfully request that the Examiner withdraw the objection(s) and/or rejection(s) of record, allow all the pending claims, and find the application in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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